



# LB24 SERIES INDUSTRIAL FIBER-OPTIC ILLUMINATOR

# **High-Intensity Arc Lamp Technology**

USHIO's Sōlarc® Fiber-Optic Illuminators use patented Sōlarc® lamp technology. Sōlarc® Illuminators combine the efficiencies of high-pressure metal halide arc lamps, precision miniature lamp construction and precise optical alignment to deliver unequaled fiber illumination performance and value.

# **Brilliant White Light**

Unlike halogen-based light sources, Sōlarc® Illuminators deliver intense, brilliant white light, typically with a color temperature greater than 5,000K — comparable to true daylight.

# **Long Life and Cost Effective**

Sōlarc® lamp technology is at the heart of the illuminator, requiring only 24 watts of energy and typically lasting about 500 hours (median life). Comparable halogen-based illuminators require 150 watts of power and may have average rated lifetimes between 40-50 hours. Sōlarc® lamps consume considerably less energy and last nearly 10-12 times longer, assuring lower cost of ownership.

# **Superior Fiber-Optic Coupling**

Available with an ACMI and optional industry-standard optical couplers, precisely aligned, highly efficient Sōlarc® lamps provide superior light coupling into small and miniature fiber bundles. This allows the lamps to deliver significantly more light at a fraction of the size and wattage when compared to halogen alternatives.

# Flexible Design

The LB24 series is available with a variety of fiberoptic couplers. The available power supply is rated for operation on voltages between 100 VAC and 240 VAC and frequencies from 50 Hz to 60 Hz.

### **Enhanced Features**

- Internal Thermal Cutout
- · Double Insulated
- Low Electrical Noise
- Cooler Operation
- Positive-Lock ACMI Fiber Adapter
- Full-Off Light Attenuation
- Medical-Grade UV/IR Filter Included
- Threaded Input Port—Allows for Custom Adapters
- Improved Lamp Retention System

### **Conforms to Industrial Standards**

The LB24 series meets the standards identified in the accompanying specifications. Sōlarc® Illuminators are the solution for applications that require intense, white illumination, such as lighting for borescopes, fiberscopes, UV/NDT inspection, fluorescence or microscopes.





LB24 Specifications	
Illumination System Lamp Light Output Color Temperature Lamp Life (Median) Integral Iris	Sōlarc® Lamp Technology 590 Lumens (4 mm [0.16"] glass rod) 5,000K 500 Hrs 0%–100% attenuation
Physical Dimensions Weight	147.3 mm [5.8"] length x 88.9 mm [3.5"] weight x 71.1 [2.8"] height 1.0 kg (2.2 lbs)—includes power supply 0.5 kg (1.2 lbs)—device only
Electrical Power Supply Input Voltage Input Current Output Device Only Input Voltage Connector Type	100 to 240 VAC, 50-60 Hz 1 A @ 100 VAC 12 VDC, 3.4 A  12 VDC 2.1 mm [0.08"] x 5.5 mm [0.22"] Center Positive Jack (ref. Switchcraft 722A)
Environmental Temperature Humidity	10°C (50°F) to 30°C (86°F) 15% to 95% RH noncondensing
Approvals	EN/IEC 61010-1 CAN/CSA C22.2 No. 61010-1 CONFORMS TO: UL STD 61010-1
Ordering Information	Available Power Supplies

### Ordering Information

### **Part Number**

LB24-N4 LB24-NO LBM-PS-00 LBM-PS-01 LB-CLP AL-1824 704904 704905 704906 50160 50159

# Description

Illuminator/ACMI Adapter
Illuminator/No Adapter
Power Supply—North American
Power Supply—International
Cigarette Lighter Power Plug
Replacement Sölarc® Lamp
AC Power Supply Cord—Europe
AC Power Supply Cord—Australia
AC Power Supply Cord—UK
Olympus Adapter (screw-on)
Storz Adapter (screw-on)



LBM-PS-00 included with LB24MS00-004-00. North American-Style Plug



LBM-PS-01 included with LB24MS00-004-01. IEC Adapter to allow a variety of cords (sold separately)

# LB24 (All measurements in mm [inches].)





